

WHAT IS CLAIMED IS:

Sub A14

1. An oxygen generating composition for producing a breathable gas upon ignition of the composition, comprising:
a metal powder as a fuel;
strontium peroxide; and
an oxygen source selected from the group consisting of alkali metal chlorates, alkali metal perchlorates, and mixtures thereof.
2. The oxygen generating composition of Claim 1, further comprising a transition metal oxide catalyst.
3. The oxygen generating composition of Claim 1, further comprising a binder.
4. The oxygen generating composition of Claim 1, wherein said transition metal oxide catalyst is selected from the group consisting of cobalt oxide, copper oxide, nickel oxide, iron oxide, manganese oxide, and mixtures thereof.
5. The oxygen generating composition of Claim 1, wherein said oxygen source is an alkali metal chlorate selected from the group consisting of sodium chlorate, potassium perchlorate, lithium perchlorate, and mixtures thereof.
6. The oxygen generating composition of Claim 3, wherein said binder is an inorganic binder selected from the group consisting of glass powder, glass fiber, ceramic fiber, bentonite, kaolinite and mixtures thereof.
7. The oxygen generating composition of Claim 1, wherein said metal powder is selected from the group consisting of tin powder, iron powder, titanium, copper, aluminum, and magnesium, and mixtures thereof.

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8. An oxygen generating composition for producing a breathable gas upon ignition of the composition, comprising:
- from zero to about 15% by weight of a metal powder as a fuel;
 - about 0.1-20% by weight strontium peroxide as a catalyst, a chlorine suppressant, a reaction rate modifier, and a secondary oxygen source;
 - from zero to about 15% by weight of a transition metal oxide catalyst;
 - from zero to about 5% of a binder; and
 - the remainder of an oxygen source selected from the group consisting of alkali metal chlorates, alkali metal perchlorates, and mixtures thereof.
9. The oxygen generating composition of Claim 8, wherein said transition metal oxide catalyst is selected from the group consisting of cobalt oxide, copper oxide, nickel oxide, iron oxide, manganese oxide, and mixtures thereof.
10. The oxygen generating composition of Claim 8, wherein said transition metal oxide catalyst is selected from the group consisting of cobalt oxide, nickel oxide and copper oxide.
11. The oxygen generating composition of Claim 8, wherein said oxygen source is an alkali metal chlorate selected from the group consisting of sodium chlorate, potassium perchlorate, lithium perchlorate, and mixtures thereof.
12. The oxygen generating composition of Claim 8, wherein said metal powder is selected from the group consisting of tin powder, iron powder, titanium, copper, aluminum, and magnesium, and mixtures thereof.
13. The oxygen generating composition of Claim 8, wherein said binder is an inorganic binder selected from the group consisting of glass powder, glass fiber, ceramic fiber, bentonite, kaolinite and mixtures thereof.

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- 5 14. An oxygen generating composition for producing a breathable oxygen gas upon ignition of the composition, comprising:
- from zero to about 12% by weight of metal powder as a fuel;
 - about 1-6% by weight strontium peroxide as a catalyst, a chlorine suppressant, a reaction rate modifier, and a secondary oxygen source;
 - from zero to about 10% by weight of a transition metal oxide catalyst;
 - from zero to about 5% of a binder; and
 - the remainder of an oxygen source selected from the group consisting of alkali metal chlorates, alkali metal perchlorates, and mixtures thereof.
15. The oxygen generating composition of Claim 14, wherein said transition metal oxide catalyst is selected from the group consisting of cobalt oxide, copper oxide, nickel oxide, iron oxide, manganese oxide, and mixtures thereof.
16. The oxygen generating composition of Claim 14, wherein said transition metal oxide catalyst is selected from the group consisting of cobalt oxide, nickel oxide and copper oxide.
17. The oxygen generating composition of Claim 14, wherein said oxygen source is an alkali metal chlorate selected from the group consisting of sodium chlorate, potassium perchlorate, lithium perchlorate, and mixtures thereof.
18. The oxygen generating composition of Claim 14, wherein said wherein said metal powder is selected from the group consisting of tin powder, iron powder, titanium, copper, aluminum, and magnesium, and mixtures thereof.
19. The oxygen generating composition of Claim 14, wherein said binder is an inorganic binder selected from the group consisting of glass powder, glass fiber, ceramic fiber, bentonite, kaolinite and mixtures thereof.

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